



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,256	09/10/2003	Tsung-I Yu	YUTS3014/EM	4016

23364 7590 11/15/2005

BACON & THOMAS, PLLC
625 SLATERS LANE
FOURTH FLOOR
ALEXANDRIA, VA 22314

EXAMINER

ALTER, ALYSSA M

ART UNIT	PAPER NUMBER
----------	--------------

3762

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/658,256

Applicant(s)

YU, TSUNG-I

Examiner

Alyssa M. Alter

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-19 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 09/10/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

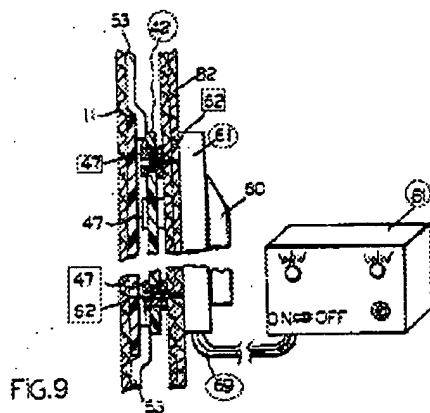
The amendment filed on August 26, 2005 (paper No. 2) has been received and considered. By this amendment, claims 1, and 4 have been amended, claim 6 has been cancelled, claim 19 has been added and claims 1-19 are now pending in the application.

Response to Arguments

Applicant's arguments see page 6, filed on August 26, 2005, with respect to the rejection(s) of claim(s) 1-18 under 35 U.S.C 102(b) and 103(a) have been fully considered but they are not persuasive.

The Applicant argues that Sarbacher (US 3,610,250), does not disclose "clustered buttons that not only connect the conductive strips and a controller, but that also mount the controller by enabling the controller to be plugged directly into the buttons, as illustrated in Fig. 1 and recited in claim 1".

However, as the examiner had previously indicated, the selector switch 61, displayed in figure 7 and figure 9, is considered to be representative of **a component** of the electro-stimulating controller (see explanation below). The electro-stimulating controller does in fact possess buttons that enable it to be plugged in to the terminal plug receptacle 42 mounted on the garment 11. These buttons are depicted as 47 in figure 5 and as 62 in figure 7. The connection and mounting of the controller on the garment is displayed in figure 9, replicated below.



Furthermore, since the selector switch is connected to the pulse generator with a cable 69, which supplies desired electrical muscle-stimulating pulses from a generator 81" (col. 3, lines 58-59), the examiner considers both the selector switch and the pulse generator to be representative of the electro-stimulating controller. Since the electro-stimulating controller contains both the selector switch 61 **and** the pulse generator 81, facilitated by the connection of cable 69, the electro-stimulating controller inherently possesses an internal circuit (IC). Figure 9 also displays the ON/OFF button on the pulse generator 81.

This representation of the electro-stimulating controller, consisting of both the selector switch and the pulse generator, is indicated in the previous Office Action on page 3, in regards to claim 4. "As to claim 4, an IC circuit is a chip or a small electronic device made out of semiconductor material {See Reference U}. Inherent the pulse generator would have a chip. Therefore, the examiner considers the pulse generator to have an IC circuit". Since claim 4 previously claimed the use of an IC circuit within the electro-stimulating controller and the examiner had rejected the claim, as above, with the inherency of an IC circuit located in the pulse generator, it can be concluded that the

examiner previously included the pulse generator in the representation of the electro-stimulating controller.

The Applicant further argues that Post et al. (US 6,210,771) fails to disclose an electro-stimulation controller with clustered buttons that connect the controller, as recited in claim 1.

However, this argument is moot, on the grounds that the examiner is not employing the Post et al. reference to teach the controller, but the teaching of overlapping conductive strips and electrically conductive cloth as set forth in column 1 & 2, lines 66-67 & 1-12 and column 2, lines 42-46, respectively.

In addition, the Applicant discloses on page 7 of the Remarks, "the integration of components and fabric taught by Post might be convenient, it is hardly suggestive of the claimed controller". Again, this is a moot argument. Additionally the examiner considers the Applicant to agree that such modifications taught by Post et al., such as overlapping conductive strips and electrically conductive cloth, would have been convenient and thus obvious and employable to one skilled in the art at the time the invention was made.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 19 is further rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. The examiner is unsure why "a power on/off switch" is further limiting the previous "on/off button" as disclosed in the independent claim. Furthermore, the examiner considers the on/off button to be synonymous with a on/off switch, and has treated the claim as such.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-4, 6-8 and 10-17 stand rejected under 35 U.S.C. 102(b) as being anticipated by Sarbacher (US 3,610,250). Sarbacher discloses an electrical contact-carrying garment for muscle stimulation that can be used to cover and treat the upper and lower body. Figure 1 displays the electrodes, which the examiner considers to be the plurality of conductive plates, and the leads, which the examiner considers to be the plurality of conductive strips. The plug receptacle 41 can also be seen in figure 5. The selector switch plug, which is adapted for insertion into the plug receptacle of figure 5, can be seen in figure 7. The examiner considers the selector switch plug to be the electro-stimulating controller, with a plurality of conductive buttons, which enables the attachment to the plug receptacle conductive buttons.

As to claims 3, 11-13 and 17, "the body garments 11 and 12 are fabricated to fit snugly to the body of the user to facilitate electrical contact between the electrodes and

Art Unit: 3762

the skin of the user, and may preferably be made from a stretch material, such as a knit fabric, or a stretch yarn. The various body-contacting electrodes are affixed to the inside surface of the garment either by an adhesive or by stitching, or the like, and are formed of a flexible conductive material, such as a metal foil or a conductive plastic" (col. 2, lines 68-75). In addition, the "body garment with built in or affixed electrodes appropriately placed to enable selective stimulation of desired muscle areas, Appropriate electrical conductor leads from each of the built in electrodes are affixed to or entwined in the fabric of the garment, and are terminated in one selector switch"(col. 1, lines 52-57). Since the electrodes and leads can be built in or entwined, the examiner considers the strips and plates to be embedded.

As to claim 4, an IC circuit is a chip or a small electronic device made out of semiconductor material {See Reference U}. Inherent the pulse generator would have a chip. Therefore, the examiner considers the pulse generator to have an IC circuit.

As to claim 7, figure 12 displays an enlarged view of the selector switch and pulse coupling unit coupled together and carried by a garment. The examiner considers the knob 76 to be the stepping switch.

As to claims 8 and 15, figure 2 displays the conductive strips being arranged in parallel formation.

As to claim 10, the conductive strips, also know as the leads, and conductive buttons, which are the selector switch plug and the plug receptacle, are rivet-connected by both a male and female piece, as seen in figures 5 and 7.

As to claim 16, since the body garment is fabricated from a stretch material, the examiner considers it to inherently have elastic bands on the lateral sides.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 5 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Sarbacher (US 3,610,250). Sarbacher discloses the claimed invention except for the wave signal range. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the signal range, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.
2. Claims 9 and 18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sarbacher (US 3,610,250) in view of Post et al. (US 6,210,771). Sarbacher discloses the claimed invention except for the overlapping conductive strips and electrically conductive cloth. Post et al. teaches that it is known to use electrically conductive cloth and overlap the conductive strips as set forth in column 1 & 2, lines 66-67 & 1-12 and column 2, lines 42-46, respectively. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the

electrically conductive strips as taught by Sarbacher since such a modification would allow the garment to be washable and ensure electrical contact with the body.

•

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: claim 19 claims an on/off switch, which was not previously mentioned to in the specification. As a result the examiner has considered an on/off button to be synonymous with an on/off switch.

Conclusion

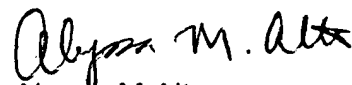
THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alyssa M. Alter whose telephone number is (571) 272-4939. The examiner can normally be reached on M-F 9am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Alyssa M Alter
Examiner
Art Unit 3762


JEFFREY R. JASTRZAB
PRIMARY EXAMINER
11/14/05